

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/071063 A1

(51) International Patent Classification⁷: C12N 5/00, A61K 35/36

(21) International Application Number: PCT/CA2005/000108

(22) International Filing Date: 27 January 2005 (27.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/539,556 27 January 2004 (27.01.2004) US

(71) Applicant (for all designated States except US): **THE HOSPITAL FOR SICK CHILDREN** [CA/CA]; 555 University Avenue, Toronto, Ontario M5G 1X8 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MILLER, Freda, D.** [CA/CA]; 87 Marlborough Avenue, Toronto, Ontario M5R 1X5 (CA). **FERNANDEZ, Karl** [CA/CA]; 215 Kingston Road, Apartment 2, Toronto, Ontario M4L 1T5 (CA). **BIERNASKIE, Jeff** [CA/CA]; 2710-736 Bay Street, Toronto, Ontario M5G 2M4 (CA). **McKENZIE, Ian** [CA/CA]; 420 Camden Circle, Mississauga, Ontario L4Z 2P4 (CA).

(74) Agents: **ROBINSON, Christopher, J.** et al.; Smart and Biggar, Box 11560, Vancouver Centre, Suite 2200, 650 West Georgia Street, Vancouver, British Columbia V6B 4N8 (CA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS OF MAKING AND USING SKIN-DERIVED STEM CELLS

(57) Abstract: The present invention describes a method for isolating skin derived precursor stem cells from hair follicles or dermal papillae and also describes the use of these cells for inducing hair growth.



WO 2005/071063 A1